

WHAT IS CLAIMED IS:

1. A fixing apparatus comprising:
 - a heating member;
 - a coil configured to apply a magnetic field for induction heating to the heating member;
 - 5 a temperature sensor configured to detect the temperature of the heating member;
 - a detection section configured to detect an amount of variation per unit time of the temperature detected by the temperature sensor; and
 - 10 an output control section configured increase or decrease the output of the coil by an amount corresponding to a result of detection by the detection section, while holding the detected temperature of the temperature sensor within an initially set range.
2. A fixing apparatus according to claim 1, wherein said unit time is a value proportional to the magnitude of a heating capacity of the heating member.
3. A fixing apparatus according to claim 1,
 - 20 further comprising a pressure applying member configured to, while being set in pressure contact with the heating member, convey a paper sheet for fixing in a manner to sandwich the paper sheet relative to the heating member.
- 25 4. A fixing apparatus comprising:
 - a heating member;
 - a coil for induction heating which is positioned

near the heating member;

a resonance circuit including the coil as
a constituent element;

a switching element configured to excite the
resonance circuit;

an oscillator configured to output an ON-OFF
signal for ON-OFF driving of the switching element;

a temperature sensor configured to detect the
temperature of the heating member;

10 a detection section configured to detect an amount
of variation per unit time of the temperature detected
by the temperature sensor; and

15 an output control section configured to increase
or decrease the duty of an ON-OFF signal outputted from
the oscillator by a value corresponding to a result of
detection by the detection section, while holding the
detected temperature of the temperature sensor within
an initially set range.

5. A fixing apparatus according to claim 4,
20 wherein said unit time is a value proportional to the
magnitude of a heat capacity of said heating member.

6. A fixing apparatus according to claim 4,
further comprising a pressure applying member
configured to, while being set in pressure contact with
25 the heating member, convey a paper sheet for fixing in
a manner to sandwich the paper sheet relative to the
heating member.

7. An image forming apparatus comprising:
 - a heating member;
 - a coil configured to apply a magnetic field for induction heating to the heating body;
 - 5 a temperature sensor configured to detect the temperature of the heating body;
 - a detection section configured to detect an amount of variation per unit time of the temperature detected by the temperature sensor; and
- 10 an output control section configured to increase or decrease the output of the coil by an amount corresponding to a result of detection by the detection section while holding the detected temperature by the temperature sensor within an initially set range.
- 15 8. An image forming apparatus according to claim 7, wherein said unit time is a value proportional to the magnitude of a heat capacity of the heating member.
9. An image forming apparatus according to claim 7, further comprising a pressure applying member configured to, while being set in pressure contact with the heating member, convey a paper sheet for fixing in a manner to sandwich the paper sheet relative to the heating member.